

WITHOWSKI, H.; LEWANDOWSKI, A.

Cationite paper. III. Quantitative determination of alkaloids in yellow lupine.  
p. 321.

CHEMIA ANALITYCZNA. (Komisja Analityczna Polskiej Akademii Nauk i Naczelna  
Organizacja Techniczna) Warszawa. Poland. Vol. 4, No.  $\frac{1}{2}$ , 1959

Monthly list of East European Accessions (EEAI) LC, Vol. 8, No. 8, August 1959  
Uncla.

MALEJKA, D.; WITKOWSKI, H.

The use of ionitized paper to determine alcaloids in tinctures.  
I. Tinctura Cinchonae. Bull.Soc.amis Sc.Poznan, Ser.C no.9:27-33  
1959.

(CINCHONA chem.)

LEWANDOWSKI, Anzelm; WITKOWSKI, Henryk

Use of cationite paper for estimations of atropin in plant material.  
Mat chemia 4:3-10 '61.

1. Uniwersytet im. Adama Mickiewicza w Poznaniu, Katedra Chemii  
Ogólnej.

LEWANDOWSKI, Anzelm; WITKOWSKI, Henryk

The use of cationite paper for the determination of atropine in plants. Mat chemia 4:3-10 '61.

1. Katedra Chemii Ogolnej, Poznan.

WITKOWSKI, I.; BALSKEI, Z.

Elaboration of the foundations for the automation and regulation of sizing machines. Biuletyn Wlok. p. 1.

PRZEGLAD WLOKIENNICZY. (Stowarzyszenie Inzynierow i Technikow Przemyslu Wlokienniczego) Lodz, Poland. Vol. 12, no. 1, Jan. 1958.

Monthly List of East European Accessions (EEAI) LC. Vol. 8, no. 7, July 1959.

Uncl.

BATSYA, Kazimir [Bacia, K.]; VITKOVSKIY, Bronislav [Witkowski, B.];  
~~VITKOVSKIY, Irzhi~~ [Witkowski, I.]; SHAKHNAROVICH, M.A. [translator];  
BUGLAY, B.M., red.; ~~AZAROVA~~, V.G., red.izd-va; LOBANKOVA, R.Ye.,  
tekhn.red.

[Manual for upholsterers] Rukovodstvo.dlia oboishechikov  
miagkoi mebeli. Moskva, Goslesbumizdat, 1961. 181 p.

Abridged translation from the Polish.

(MIRA 14:6)

(Upholstery)

WITKOWSKI, J.

TECHNOLOGY

PERIODICAL: BUDOWNICTWO PRZEMYSLOWE. Vol 7, no. 7, July 1958

WITKOWSKI, J. Some organizational problems of a system of cost accounting for heavy building machinery. p. 19.

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April 1959, Unclass

WITKOWSKI, JAN

ZYSK, Jerzy; WITKOWSKI, Jan.; ZBIGNIEW, Kaleta.

[No translation] Acta physiol.polon 6 no.4:421-440 1955.

1. Z Wojskowego Instytutu Naukowo-Badawczego i Doswiadczalnego  
Medycyny Lotniczej.

(BLOOD,

alcohol, eff. of altitude in non-drinking subjects, Widmark  
test (Pol))

(ALCOHOLS, in blood,

eff. of altitude in non-drinking subjects, Widmark test (Pol))

(ALTITUDE, effects,

on blood alcohol in non-drinking subjects, Widmark test (Pol))



WITKOWSKI, Jerzy, mgr., inż.

Standardization in the furniture industry. Normalizacja 29 no.11/12:  
535-536 '61.

1. Kierownik Branżowego Centralnego Ośrodka Normalizacji Zjednoczenia  
Przemysłu Meblarskiego.

(Poland—Furniture)

WITKOWSKI, JOZEF.

WITKOWSKI, JOZEF. The Structure of the Universe. Wszechswiat, 1948, p. 97-98.

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WITKOWSKI, JOZEF. On a Certain Phenomenon in Connection with Total Lunar Eclipses. Poznanskie Towarzystwo przyjaciol nauk. Bulletin. Serie B: Sciences mathematiques et naturelles, 1948, no. 9, p. 147-148.

WITKOWSKI, JOZEF.

WITKOWSKI, JOZEF. Solar Corona and its Influence upon the Earth's Atmosphere.  
Przegląd meteorologiczny i hydrologiczny, 1949, v. 2, p. 142-146.

WITKOWSKI, Jozef

WITKOWSKI, Jozef: "Korona Słoneczna i jej wpływ na atmosferę ziemską," (The solar corona and its influence on the earth's atmosphere), Przegląd Meteorologiczny i Hydrologiczny, Warsaw No 1-4, 1949, p 15-19.

WITKOWSKI, JOZEF.

WITKOWSKI, JOZEF. Migration of Poles in the Light of Modern Investigations.  
Urania, 1951, no. 1/2, p. 1-4.

WITKOWSKI, JOZEF.

WITKOWSKI, JOZEF. Oppenheim's Phenomenon and its Bearing on the Origin of Comets. Poznanskie Towarzystwo przyjaciol nauk. Bulletin. Serie B: Sciences mathematiques et nautrelles, 1953, no. 12, p. 205-210.

WITKOWSKI. J.

"Copernicus' Reform". p. 70 E(Nauka Polska. Vol. 1, no. 4, Oct./Dec. 1953 Warszawa.)

Vol. 3, no. 6  
SO: Monthly List of East European Accessions./Library of Congress, June 1954, Uncl.



POL/26-59-1-1/20

3(7)

AUTHOR: Witkowski, Józef, Professor, Doctor

TITLE: Latitude Station of the Polish Academy of Sciences at Borowiec

PERIODICAL: Acta geophysica polonica, 1959, Nr 1, pp 3-8 (Poland)

ABSTRACT: The author describes the situation, the technical equipment and the activities of the newly built station. The geographical coordinates of the Latitude Station at Borowiec are  $18^{\circ}18'45''$ ,  $+ 52^{\circ}16'38''$  and the elevation is 80 m above sea level. The station lies on the same parallel of latitude as the Station of Irkutsk. The station consists of the office building, a dwelling house, a farm building, two observing houses for zenith-telescopes and two others for transit-instruments, a 10 m deep underground room for clocks and horizontal pendulums. The observing houses are equipped with one Zeiss zenith-telescope of aperture 135 mm and focal length 1750 mm, and with one zenith-telescope built in the workshops of the Poznań University Observatory, aperture 110 mm and the focal length 2020 mm. In the other two observing houses

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Latitude Station of the Polish Academy of Sciences at Borowiec

are two modern Zeiss transit-instruments of 100 mm aperture and 1000 mm focal distance. The time service of the station is equipped with three crystal clocks and one pendulum clock of the Shortt type delivered by the Synchrotime Co Ltd, London. The crystal clocks were designed by the consulting electrical engineer of the Station Mr. S. Cierniewski. The two horizontal pendulums are double pendulums of the Lettau type and were also designed in the workshops of the Poznań Observatory. The gravity variations are registered with an Askania GS-11 gravity meter. The station takes part in the activities of IGY as concerns latitude, longitude and earth tides. The latitude observations began in August 1957, the time service and longitude observations were started in October 1957, the observations of earth tides began at the end of September 1958. The number of Talcott star-pairs observed by the station was 1860 up to October 1958. 2590 star transits have been recorded with the two Zeiss instruments. The staff of the station also takes part in observations of "sputniks". ✓

Card 2/3

Latitude Station of the Polish Academy of Sciences at Borowiec POL/26-59-1-1/20

The scientific staff of the station at present consist of: Director: Professor Doctor J. Witkowski; Head of the time service: Docent, Doctor F. Koebecke, Associates: Doctor S. Andruszewski, Master of Sciences J. Dobrzycki (Latitude), Doctor H. Hurnik. Assistants: Master of Sciences M. Dobrzycka (Latitude, gravity meter), J. Domiński (Time service), J. Moczko (Time service), S. Nowak (Latitude, pendulums). The decision of building this latitude station was taken at the Latitude Conference held in Moscow in November 1949 (proposal of Professor A. Orlov, Head of the Latitude Service of the USSR). There are 18 photographs, 3 graphs and 1 diagram.

ASSOCIATION: Stacja szerokościowa Polskiej akademii nauk w Borowcu (Latitude Station of the Polish Academy of Sciences at Borowiec)

SUBMITTED: October 3, 1958 ✓

Card 3/3

P/002/60/000/003/001/003  
D001/D101

AUTHOR: Witkowski, Józef

TITLE: Earth crust tidal motions and their investigations at the PAS astronomical latitudinal station in Borowiec near Poznań

PERIODICAL: Nauka Polska, no. 3, 1960, 33-43

TEXT: In this article the author outlines the scope of investigations carried out at the Astronomiczna Stacja Szerokościowa Polskiej Akademii Nauk (Polish Academy of Sciences, Astronomical Latitudinal Station) in Borowiec organized in 1957. Coordinates of this station are: 52°16'38"N-10°08'18.4"E [Abstracter's note: There is an obvious mistake in the longitude coordinate. It should read 17°08'18.4"]. It is one of 33 stations of this type in existence and recorded in an official index issued by the Międzynarodowa Asocjacja Geodezji (International Geodesy Association) as a gravimetric and pendulum station. (There is also another astronomical observation station in Józefosław near Warsaw, a branch of the Polytechnic Institute in

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Earth crust tidal motions ...

P/002/60/000/003/001/003  
D001/D101

Warsaw, but it is not mentioned in the official register). In the introductory part of this article, the author discusses problems connected with earth rotation and the phenomenon of earth crust tidal motions. The latter, a new branch of geophysics, was developed in western countries in the second part of the XIX century; in Poland investigations in this field commenced only very recently. Best known and observed symptoms of earth crust tidal motions are: (1) deviation of the plummet line in relation to the earth's crust; (2) deviation of the plummet line in relation to the world axis [Abstracter's note: An obvious misprint; it should read "earth's axis"]; (3) gravitation forces intensity fluctuations; (4) the decrease of the oceans' tidal amplitude. Less precisely elucidated are the earth crust elastic tension forces and the tides in underground water reservoirs. Further, the author points out the importance of an accurate knowledge of gravitation forces fluctuations from a practical point of view i. e., for gravimetrical prospecting. The station in Borowiec is equipped with water-tight clock- and pendula cellars, two pavillions with transit instruments and two pavillions with zenithal telescopes. At the astronomical section,

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D001/D101

Earth crust tidal motions...

time and latitudinal service is maintained and at the geophysics section observations of gravitation force fluctuations and plummet line deviation at right angle directions are carried out. Gravitation forces fluctuation is estimated by the Askania GS 11 No 110 recording gravimeter, sensitive to  $40 \mu\text{gal/cm}$ , lent by Professor T. Olczak, director of the Instytut Geofizyki i Geodezji PAN (PAS Geophysics and Geodesy Institute). The plummet line inclination is estimated by means of two horizontal pendula of the Lettau-type placed in a 10 m deep cellar. Registration, which commenced in 1958, is carried out continuously in 30 day cycles. Following the recommendations of the earth crust tidal motion committee (Doodson, Lecolazet Pertsev), the recorded graphs are evaluated by a harmonic analysis and sent to the International Geophysical Year Center. Results of 8 months investigations were presented at the Trieste Symposium in 1959. From compiled gravimetrical investigation results, a suggestion emerges that a  $2 - 3^\circ$  phase shift of earth crust tidal motion takes place. The scientist Paryiskyi expressed the opinion that the

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Earth crust tidal motions...

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D001/D101

earth's rotation retardation of 0.001 sec/100 years is to some extent influenced by the earth crust tidal motion.

ASSOCIATION: Polska Akademia Nauk (Polish Academy of Sciences).

Card 4/4

WITKOWSKI, Jozef

Earth tides and their observation at the latitude station of the  
Polish Academy of Sciences. Review Pol Academy 5 no.1:53-62 Ja-Mr  
'60. (ERAI 10:3)  
(Polish Academy of Sciences) (Earth tides)



WITKOWSKI, Jozef

Influxes of the earth crust and their research at the Astronomical Latitude Station of the Polish Academy of Sciences in Borowiec near Poznan. Nauka polska 8 no.3:33-43 J1-S '60.

1. Członek korespondent Polskiej Akademii Nauk, Warszawa.

WITKOWSKI, J.; OLPINSKA-WARZECHOWA, K.

A list of scientific works of prof. Wladyslaw Smosarski.  
Przeegl geofiz 6 no.3:213-216 '61.

P/002/63/000/001/001/001

AUTHOR: Witkowski, Jozef

TITLE: The [Polish] Astronomical Research Office.

PERIODICAL: Nauka Polska, no. 1 (43), 1963, 45-56.

TEXT: Until its hoped-for COA [Centralne Obserwatorium Astronomiczne, Central Astronomical Observatory] becomes a reality, PAN [Polska Akademia Nauk, Polish Academy of Sciences] has created, in 1957 Zaklad Astronomii (Astronomical Research Office) (Prof. Jozef WITKOWSKI, Director). The office comprises the existing Astrophysics Laboratory I in Torun, Astrophysics Laboratory II in Warsaw, as well as the Laboratory of Astrometry and Celestial Mechanics with its ASS [Astronomiczna Stacja Szerokosci, Astronomical Latitudinal Station] in Borowiec (referred to as the ASS throughout the article). Its tasks are to pursue the realization of the COA and to direct the research of its institutions in the area of astrophysics, in the investigation of the physical state and chemical composition of the stars and interstellar matter in our and other galaxies, from the standpoint of evolution; and in the area of astrometry and celestial mechanics, in investigating the earth's rotational motion, cataloguing the faint stars, mechanics of the solar system, and other investigations requiring special care.

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The Polish Astronomical ....

From 1957 to 1961 the office managed to acquire from Zeiss Schmidt 60/90 cm projection telescope (placed at the Observatory in Piwnice until COA is ready); a zenith telescope, two Lettau pendulums, and three quartz clocks (for ASS); a 2-m diameter mobile parabolic telescope, 127-Mcs and 32-Mcs interferometers and a logarithmic-periodic interferometer, all of own special design (for Lab. I); and a 35-cm reflector and photoelectric photometer (for Lab. II).

In the Astrophysics Laboratory I (director: Prof. W. Iwanowska) research is being carried out in spectroscopy and stellar and radio astronomy on stellar populations, stars' magnetic fields, physics of comets, and radiowave radiation of the sun, as well as organized fundamental photometric determinations (Krakow).

The Astrophysics Laboratory II (director: Prof. W. Zonn) has been concentrating primarily on complex studies of interstellar medium (polarization, absorption, magnetic fields in interstellar space), with emphasis on the observed and theoretical problem of interstellar polarization of the stars' light. Other studies here cover gases in interstellar space, measurements of brightness of some stars, and, together with the Zaklad Geofizyki (Geophysics Research Office) of PAN, studies on the diffusion of light (sun) through diffusing media (clouds).

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The Polish Astronomical .....

The Laboratory of Astrometry and Celestial Mechanics with its ASS (director: Prof. J. Witkowski) carries out investigations on the location of the earth's rotational axis; on the motion, period, and variability of the earth's spin; and on the problem of the earth's crust flows under the gravitational effect of the sun and the moon. Vertical component measurements commenced in 1958 are submitted to the Moscow and International Data Centers.

The Astronomy Research Office is responsible for the arrangement of cooperative national projects and the extensive participation of Polish astronomy on the international level, as well as for the many publications of its workers.

ASSOCIATION: Director, Zaklad Astronomii (Astronomy Research Office) and of Pracownia Astrometrii i Mechaniki Nieba (Laboratory of Astrometry and Celestial Mechanics), including the Astronomiczna Stacja Szerokosciowa (Astronomical Latitude Station) in Borowiec. Editor: Acta Astronomica.

Card 3 of 3

WITKOWSKI, Jozef, Professor

Work carried out by the Research Center of Astronomy. Review  
Pol Academy 8 no.2:53-57 Ap-Je '63.

1. Corresponding member, Polish Academy of Sciences, Head, Research  
Center of Astronomy, Poznan, Sloneczna 36.

WITKOWSKI, Jozef, prof., (Poznan, ul. Sloneczna 36)

Astronomical Laboratory. Nauka polska 11 no.1:45-56 Ja-F  
'63.

1. Członek korespondent Polskiej Akademii Nauk, Kierownik Zakładu  
Astronomii Polskiej Akademii Nauk, Warszawa, Aleje Ujazdowskie 4.

WITKOWSKI, J.

Chair of Astronomy and the Astronomical Observatory of the Poznan  
University in the years 1945-1960. Postepy astronomii no.2:169-  
178 '63.



WITKOWSKI, J. (Nowy Targ)

On a characterization of the Euclidean sphere. Annales Pol  
math 13 no.2:121-127 '63.

WITKOWSKI, J.

Address held at the celebration of Professor Jelicjan Kepinski's  
50th anniversary of scientific activities. Postępy astronom 12  
no.2:141-147 '64.

CATEGORY : Cultivated Plants. Fodder Grasses and Roots.

AD3. JOUR : Red Zvezd-Biologiya, No. 5 : 1957, No. 20 580

AUTHOR : Witkowski, Karol Janusz

INST : Inst. of Fertilizers and Agric.

TITLE : Study of the Possibilities of Using Rape as  
Roughage and for Seeds.

ORIG. PUB.: Wydawn. własne. Inst. uprawy nawozenia i  
głazoznawstwa, 1957, No. 61, 29-41

ABSTRACT : At the Institute of Fertilizers and Agricul-  
ture in 1943-1944 and then in 1952-1955 at  
experimental fields in Celestin and Pawlovic  
in Poland, the possibility of using one single  
winter rape planting for roughage and seeds  
was studied. It was established that cutting  
the green mass of the rape produces consider-  
able weakening of plant viability principally  
through the incidence of disease. The seed  
output was cut by 24-39%, the absolute weight

CARD:

1/2

POLAND / Cultivated Plants. Commercial, Oleaceous,  
Sugar Bearing.

M-4

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 6358  
Author : Witkowski, Karol Janush; Hoffmannova, Anna  
Inst : Not given  
Title : Comparative Study of 4 Winter Rape Varieties  
with Splitting and Non-Splitting Legumes Under  
Various Ecological and Geographical Conditions  
Depending on the Time of Crop Harvesting  
Orig Pub : Wydawn własne, Inst. uprawy, nawożenia i  
gleboznawstwa, 1957, No 61, 86-94  
Abstract : It was found during the field experiments,  
which were carried out at agricultural experi-  
mental stations, situated under various soil-  
climatic conditions in 1952-1953, that when  
the crop is harvested during the period of

Card 1/2

POLAND / Cultivated Plants. Commercial, Oleaceous,  
Sugar Bearing.

M-4

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 6358

overripening the yield diminishes due to  
the dropping of seeds. Non-splitting  
Gurchanskiy and Kastor varieties did not show  
a higher resistance against splitting of  
fruit in comparison with splitting varieties  
(Slenskiy and Sobutkovskiy). -- A. M. Smirnov

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POLAND / Cultivated Plants. Technical.

M-5

Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 6360

Author : Witkowski, Karol Janusz

Inst : Not given

Title : Time of Summer Rape Sowing

Orig Pub : Wydawn. własne, Inst. uprawy, nawożenia i  
gleboznawstwa, 1957, No 61, 102-108

Abstract : To determine the optimal time of sowing 29  
field experiments were carried out in various  
soil-climatic zones of Poland in 1946-1953.  
The highest yields were obtained with sowings  
which took place during the period between  
April 5th and May 5th. A considerable decrease  
of yield was observed in the case of later  
sowings. The conclusion is drawn that the

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Abs Jour : Ref Zhur - Biologiya, No 2, 1959, No. 6360

WITKOWSKI, Ryszard (eng.)

Witkowski, Ryszard (Eng.): "Radzieckie Smiglowce," (Soviet Helicopters), Skrzydlatą  
Polska, no date of publication, p. 5.

WITKOWSKI, R.

"The passenger must be seated comfortably." p. 24  
(Skrzydla I Motor, Vol 8 No 2 Jan 53 Warszawa)

SO: Monthly List of East European Accessions, Vol 2 No 9 Library of Congress Sept 53 Uncl



WITKOWSKI, R.

Position lights of airships. p. 344. (SKRZYDLATA POLSKA, Vol. 10, No. 22, May 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

WITKOWSKI, R.

"Atomic Energy." (To be Contd.) P. 520. (SKRZYDLATA POLSKA, Vol. 10, No. 33,  
Aug. 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4,  
No. 1, Jan. 1955 Uncl.

WITKOWSKI, R.

"Atomic Energy. 2." (To be Contd.) P. 542. (SKRZYDLATA POLSKA, Vol. 10, No. 34, Aug. 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 1, Jan. 1955 Uncl.

WITKOWSKI, R.

"Atomic Energy. 3." (To be Contd) P. 551. (SKRZYDLATA POLSKA, Vol. 10, No. 35,  
Aug. 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4,  
No. 1, Jan. 1955 Uncl.

WITKOWSKI, R.

"Atomic Energy." 4. (To be Contd.) P. 564. (SKRZYDLATA POLSKA, Vol. 10, No. 36, Sept. 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), IC, Vol. 4, No. 1, Jan. 1955 Uncl.

WITKOWSKI, R.

"Atomic Energy. 5." (To be Contd.) P. 580. (SKRZYDLATA POLSKA, Vol. 10, No. 37, Sept. 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4, No. 1, Jan. 1955 Uncl.

WITKOWSKI, R. . . . .

"Atomic Energy. 6. " (Conclusion) P. 596, (SKRZYDLATA POLSKA, Vol. 10, No. 38,  
Sept. 1954, Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4,  
No. 1, Jan. 1955 Uncl.

WITKOWSKI, R.

To Krynica in a helicopter.

P. 6. (Skrzkatka Polska, Vol. 13, no. 43, Oct. 1957, Warszawa, Poland)

MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC. Vol. 7, no. 2,  
FEBRUARY 1958



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PHASE I BOOK EXPLOITATION

PaL  
80V/2897

Witkowski, Ryszard, Engineer, Janusz Wojciechowski, Engineer, and Paweł Elsztein

Śmigłowce (Helicopters) Warsaw, Wyd-wo komunikacyjne, 1958. 320 p. 3,140 copies printed.

Ed.: Michał Goszczyński; Tech. Ed.: Alfred Malicki.

**PURPOSE:** This book is intended for the general reader interested in developments in aviation.

**COVERAGE:** This book describes the status of helicopter development up to 1957. Design, production, and uses of helicopters as well as their special flight characteristics are discussed. Special attention is given to the description of Polish helicopters. Names of those who have contributed to the development of Polish helicopters are mentioned. Future prospects in the industry are touched upon. The book contains the technical specifications and photos of 44 of the world's outstanding helicopters. No references are given.

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Helicopters

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Helicopters

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AVAILABLE: Library of Congress

Card 3/3

IS/os  
1/29/60

P/532/62/000/017/002/004  
D237/D308

AUTHOR: Witkowski, Ryszard, Engineer

TITLE: A general method of determining the basic performance of a helicopter

SOURCE: Warsaw. Instytut Lotnictwa. Prace, no. 17, 1962, 8-21

TEXT: The most important parameters of the performance of a helicopter are: a) the ceiling, b) the hovering ceiling, c) the hovering ceiling with ground effect, d) vertical rate of climbing, e) vertical rate of climbing with forward speed. The author presents his semi-empirical method for determining the above parameters. Theoretical and empirical formulas used in the investigation of the ground-effect lead to an expression for the ratio of lifts (with and without ground-effect) in terms of dimensionless ceilings and forward velocities, and the final formula includes some constructional parameters, such as angular velocity of the rotor. The curves obtained from this formula can serve as a basis for plotting the data

Card 1/2

A general method ...

P/532/62/000/017/002/004  
D237/D308

during flight, and of two methods used for obtaining these data, i.e. method of constant weight and method of constant power, the latter is used. The procedure for obtaining initial parametric relationships is illustrated and is followed by the derivation of formulas for b), d) and e). Numerical examples are given. Finally, the author discusses the influence of the ambient temperature on the performance of a helicopter and considers tropical conditions in a numerical example. All relationships are derived for the standard atmospheric sea-level conditions, i.e.  $h_0 = 0$ ,  $p_0 = 760$  mm Hg,  $T_0 = 288^\circ\text{K}$ . There are 16 figures and 10 tables.

SUBMITTED: May, 1962

Card 2/2

WITKOWSKI, Ryszard, mgr inz.

Length of the safe start of a helicopter. Techn lotn  
19 no.5:113-119 My '64.

WITKOWSKI, Rafal, kapitan marynarki, mgr.

U.S. Naval Institute Proceedings - 1961. Przegl morski.  
15 no.4:68-78 Ap '62.

WITKOWSKI, S.

WIECKOWSKI, Wladyslaw; WITKOWSKI, Slawomir

Chemical methods of analysis of nucleic acids. Postepy  
biochem. 2 no.1:91-105 1956.

1. Zaklad Chemii Fizjologicznej Akademii Medycznej w Lodzi  
Kierownik: prof. dr. B. Filipowicz.  
(NUCLEIC ACIDS, determination,  
analytic methods, review (Pol))



FILIPOWICZ, Bronislaw; PILEK, Kazimierz; WITKOWSKI, Slawomir; GOLEWSKI,  
Stanislaw

Nucleic acids in the blood. I. Content of nucleic acids in human  
blood serum. Polski tygod.lek. 15 no,15:537-538 11 Ap '60.  
(NUCLEIC ACIDS blood)

WITKOWSKI, Slawomir; WITKOWSKA, Zofia; FILIPOWICZOWA, Janina

A micromethod for the determination of blood pyruvic acid, Polski tygod. lek. 16 no.22:828-830 29 My '61.

1. Z Katedry Chemii Fizjologicznej A.M. w Lodzi; kierownik: prof. dr B. Filipowicz i z Katedry Chemii Ogolnej A.M. w Lodzi; kierownik: z-ca prof. mgr J. Skarzynski.

(PYRUVATES blood)

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Studies on the phenomenon of hanging of granular loose chemical products. Przem chem 41 no.2:91-95 F '62.

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Remarks on colors of automobiles. Tech motor 13 no.9:307-  
310 8'63.

WITKOWSKI, Slawomir

Influence of diphtheria toxin on the phosphorylation of  
thiamine. Arch. immun. ther. exp. 12 no.1:1-7 '64

1. Department of General and Physiological Chemistry,  
School of Medicine, Lodz.

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P.T.A. WITKOWSKI, S.

Mech. Elec. Engineering

677

621.161 : 629.13

Witkowski S. Some Possibilities of Improving Aircraft Piston Engines

"Niektóre możliwości ulepszeń lotniczych silników tłokowych"  
Technika Lotnicza. No. 4, 1950, pp. 138-140, 8 figs.

Discussion of special problems concerning aircraft piston engines (temperature distribution, vibration of the cylinder head, superfluity of valves and valve actuating mechanisms from the thermodynamic point of view etc.). Discussion of problems the solution of which, in the opinion of the author, shows possibilities of a 100% performance increase in the piston engines reviewed. Discussion of fuel and water injection and ignition. The author's suggestions are: a) reduction of the dimensions of the cylinder head (reduction of the aerodynamic resistance) by the introduction of Merz's (1942) valveless mechanism; b) increase of the relative speed of radial piston engines, which may be achieved by a partial load reduction of the main bearings; c) special air cooling of the piston from the inside of the crankcase; d) introduction of injection of a special ignition liquid into the combustion chamber to replace partially electric ignition

WITKOWSKI, S.

3

USSR .

2426. PROBLEM OF HIGHER SILANES AS AIRCRAFT FUELS. Witkowski, S.  
(Tekn. Lotn., 1953, vol. 8, (2), 36-40; abstr. in Index aere., Nov. 1954, vol.  
10, 128, 129). The author considers the main properties of silicon hydrides  
of  $Si_n H_{2n+2}$  type (the so-called silanes) with a view to their use as fuels  
for aircraft engines, especially turbines. Attention is paid to the  
calculation of the heat of combustion of silanes, for which, with the  
exception of monosilane, experimental data are lacking.

MT BT



WITKOWSKI, S.

"Discussion of the Word Moment." P. 222. (WIADOMOSCI, Vol. 22, No. 4, Apr. 1954. Warszawa, Poland)

SO: Monthly List of East European Accessions, (EEAL), LG, Vol. 4, No. 1, Jan. 1955 Uncl.

WITLOWSKI, S.; GIBOROWSKI, J.

Concerning the drying of sawdust in a fluidic phase. p. 102.

PRZEMYSŁ DRZEWNY. Centralne Zarząd Przemysłów: Drewnego, Meblarskiego, i Lesnego i Stowarzyszenie Inżynierów i Techników Lesnictwa i Drzewnictwa. Warszawa, Poland, Vol. 9, No. 4, Apr. 1958.

Monthly List of East European Accession (EEAI), IC, Vol. 8, No. 9, September, 1959.  
Uncl.

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Przem chem 41 no.2:91-95 F '62.

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Fluidizing drying chambers. Przem drzewny 13, no.4:28-31 Ap '62.

L 12290-63

EPR/EWP(J)/EPF(G)/BDS Ps-L/Pc-L/  
Pi-L RM/WW

8/081/63/000/005/047/075

AUTHOR: Witkowski, T.

TITLE: Production of aluminum n-propylate for organic syntheses, especially for synthesis of aluminum salts of amino acids

PERIODICAL: Referativnyy zhurnal, Khimiya, no. 5, 1963, 422, abstract 5N63 II (Spodzielnia Pracy Farmaceutyczno Chemiczna "Ziololek", Polish patent 45729, 9.03.62)

TEXT: Ten g of metallic aluminum and some solution of  $(C_3H_7O)_3Al$  (reaction catalyst) are added to 100 g of anhydrous  $C_3H_7OH$  and the mixture is heated to boiling. After beginning of an intense separation of  $H_2$  the heating is discontinued. In the case of an extremely violent reaction the flask is cooled with water. After dissolution of all the Al, the excess  $C_3H_7$  is distilled off. Eighty g of 99%  $C_2H_5OH$  is added to the residue and the mixture boiled for 15 minutes. The mixture, together with the residue of  $Al(OH)_3$ , is poured into a vessel for decanting, covered and left to stand for 48 hours. One hundred forty g of the clear colorless liquid, containing 0.065 g of Al in 1 g of solution is poured off. One hundred g of this liquid is added drop by drop into an agitated

Card 1/2

L 12290-63

Production of aluminum n-propylate ....

9/081/63/000/005/047/075

solution of 18 g of  $\text{H}_2\text{NCH}_2\text{COOH}$  in 39 ml of water (precipitation occurs). The mass is agitated for another 30 minutes, with gradual heating. After 24 hours, the residue is filtered out and rinsed with water.  $\sim 30$  g (93.7%)  $\text{H}_2\text{NCH}_2\text{COOAl}(\text{OH})_2$  will be obtained. Z. Rachinskiy.

[Abstractor's note: Complete translation]

Card 2/2

Witkowski, T. A.

P O L .

603.22(438)

3179

Wojciech P., Witkowski T. A. Tentative Characterization of Polish Wines.

"Próba charakteryzacji win polskich", Przemysł Rolny i Spożywczy. No. 12, 1953, pp. 419-422, 14 tabs.

An attempt was made, on the basis of 600 analyses, to delineate the characteristics of Polish fruit wines. The following ranges of sweetness of both white and red wines were examined: -- dry, semi-dry, semi-sweet and sweet, and the following conclusions were arrived at: -- 1) the Polish wine industry is completely effective in protecting wines from turning to vinegar; 2) the alcohol content of wines achieves a considerable degree of uniformity and is always in excess of the minimum established by law; 3) the sugar content, especially in dry, semi-dry and semi-sweet wines, generally exceeds the minimum regulation content; 4) the extract (not counting sugar) is regularly considerably in excess of the legal requirement; 5) the total acidity of red wines generally remains within the prescribed limits; in white wines, however, it does not always conform; 6) Polish wines are immature and insufficiently aged; they possess, nevertheless, a satisfactory steadily improving blending of flavours.

\* Three Various Agricultural Crops.

Card 1/1

WITKOWSKI, T.; DZIUBE, S.

Observations on quantitative changes in two mesofauna components (Nematoda, Acarina) in cultivated soil. p. 163

EKOLOGI POLSKA. SERIA B. (Polska Akademia Nauk. Komitet Ekologiczny  
Warszawa, Poland. Vol. 5, no. 2, 1959

Monthly list of East European Accession (EEAI) LC Vol. 9, no. 1, Jan. 1960

Uncl.



WITKOWSKI, Tadeusz

Vertical distribution of nematodes in the soil of three different observed field cultures. Nauki matematyczne przyrod Torun no.3:61-101 '58.

1. Zakład Ochrony Przyrody i Ekologii, Uniwersytet im. M. Kopernika, Torun.

WITKOWSKI, W.

"Oilseed plant sawfly." (p. 105) NOWE ROLNICTWO (Panstwowe Wydawnictwo Rolnicze i Lesne)  
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Comparison of the effectiveness of new insecticides on the rape  
beetle (*Meligethes aeneus* F.). Rocz nauk roln rosl 81 no.3:655-  
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(Poand--Rape (Plant))  
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(*Meligethes aeneus*)

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Research on the dusts of azotox made on various carriers. Rocznik rolny 82 no.1:219-249 '60. (EPAI 10:7)

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(Meligethes aeneus) (Poland--Plants) (Rape)

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Effect of antibacterial drugs on the level of 11-hydroxysteroids  
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nary communication. Gruzlica 31 no.6:661-664      Ja'63.

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Studies on the chemical control of the alder tree weevil  
(Cryptorrhynchus lapathi L.) Col. Curc. Prace naukowe  
i lesn 17 no.3:585-608 '65.

1. Institute of Plant Protection, Poznan, and Department of  
Forest Protection of the School of Agriculture, Poznan.

WITKOWSKI, Z.

WITKOWSKI, Z. Consideration concerning W. Gallias' article "Improvement of the Water Economy in the Cigarette Tissue Department." p. 275

Vol. 12, no. 9, Sept 1956  
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techn 81 no.22:10-11 Je '60.

1ST AND 2ND ORDER		PROCESSES AND PROPERTIES INDEX		3RD AND 4TH ORDER	
WITKOWSKY, E.					
CA				15	
<p>Investigation of several methods for the determination of humus in soils. Endre Witkowsky (Hungarian Geol. Survey, Budapest, Hungary). <i>Magyarországi Kémiaközlemések</i> 15, 189-98 (1942).—Elementary analysis according to Dennstedt gives the most reliable and reproducible results. The <math>KMnO_4</math> method is simple and rapid, but instead of 0.06 the factor 0.061 must be used for a 0.1 N soln.; this method usually gives higher values than does the ignition method of Dennstedt. The wet method of Walkley and Black (C.A. 28, 2827) gave no reliable results. Its modification by Novak and Pešek (C.A. 33, 5963) seems to give more exact values, about 12% lower than those of the Dennstedt method. István Finkly</p>					
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION					
FROM SYNOPTIC		TO SYNOPTIC		TO SYNOPTIC	
SYNOPTIC		SYNOPTIC		SYNOPTIC	

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Contributions to the synthesis of 1-N-butyl scopolammonium bromide  
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"Utilizing the District Telephone Network for Radiophonic Facilities of Villages." P. 58. (WIADOMOSCI TELEKOMUNIKACYJNE, Vol. 23, No. 3, Mar. 1954, Warszawa, Poland)

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"Wave Guides in the Technique of Superhigh Frequency. Tr. from the Russian."  
P. 138. (WIADOMOSCI TELEKOMUNIKACYJNE, Vol. 23, No. 6, June. 1954, Warszawa,  
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"Centralization of the Services of Radio Stations." P. 176. (WIADOMOSCI  
TELEKOMUNIKACYJNE, Vol. 23, No. 8, Aug. 1954, Warszawa, Poland)

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Up-to-date development of radiophony in Poland and guidelines for the period 1954-1965.  
p. 194. (WIADOMOSCI TELEKOMUNIKACYJNE, Warszawa, Vol. 23, No. 9/10, Sept./Oct. 1954)

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Laying feeders for radio networks and telephone lines on the same pole. p.36.  
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Communications yesterday, today, and tomorrow. p. 3.

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Low-frequency amplifier with a high power-increasing quality . p. 56

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Aleksander WITORT, "Network of Wire Diffusion Receiver Equipment," Tele-Radio,  
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Case of porphyria. Polski tygod. lek. 10 no. 44:1436-1438 31 Oct 55.

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Osseous changes in plasma-cell leukemia. Polskie arch. med. wewn.  
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1. "Report of the First Medical Institute on the 'Causes of Post-Operative Shock', I. V. NIKOLAYEV of the First Medical Institute at Sofia (Bulgaria). Translated from the Russian by Vladimir VIKTOROV. MD; pp 189-197.
2. "Report on the Work Done by the Cardiac-Surgical Center of the Krasovskiy Specialized Hospital," Vladimir LADYKIN of the Cardiac-Surgical Center (Cardiac Surgery) of the MSU (Moscow State University) in Moscow (Original summary: Vladimir LADYKIN, MD; pp 118-119 (English summary)).
3. "Use of Hypothermia in Cardiac Operations," Tadmas POLAKOFF-SCHNEIDER of the Cardiac Surgery Branch (Odessa General Hospital, Odessa), also given as Odessa General Hospital (Odessa); pp 119-121. (Original summary: Dr. Vladimir LADYKIN; pp 119-121).
4. "Surgical Treatment of Unilateral Deafness," Doctor (Moscow State University), Moscow State University, Moscow Branch of the MSU in Moscow. MD; pp 121-123 (English summary).
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